

LISTING OF CLAIMS:

1.-60. (Cancelled).

61. (Previously Presented) A touch pad, comprising:

- a light transmissive element having a first surface adapted to receive light, the light transmissive element adapted to transmit received light inside of the light transmissive element along the first surface,

- a first and a second means adapted to receive light received by the surface, transmitted along the first surface by the light transmissive element, and for outputting corresponding signals, the first and second receiving means comprising two detectors for detecting light received at at least two different areas or points, and

- means for determining, on the basis of signals from the receiving means, a position of the first surface having received light,

wherein the detectors are adapted to determine an angle of incidence of detected light at each area or point, each detector being an at least one-dimensional detector having a number of detecting points or areas and being positioned so that light from two different points on the first surface are detected at different points/areas of at least one of the detectors.

62. (Previously Presented) A touch pad according to claim 61, further comprising a display or monitor, the monitor or display being positioned so as to provide or display information through the first surface of the light transmissive element.

63. (Previously Presented) A touch pad according to claim 61, wherein the light transmissive element comprises an at least substantially flat light transmissive member having at a surface thereof a light transmissive coating or layer, an upper surface of which forms the first surface of the light transmissive element.

64. (Previously Presented) A touch pad according to claim 63, wherein the light transmissive member comprises a light transmissive display or monitor

65.-69. (Cancelled).

70. (Previously Presented) A touch pad according claim 61, further comprising an element having a first side having a number of first predetermined positions for engagement of a user and a second side having a number of second positions or areas corresponding to the first positions, the element being adapted to, when a first position is engaged by the user, emit light from the corresponding second position, the second side being positioned so that the light emitted may be received by the first surface.

71. (Cancelled)

72. (Previously Presented) A touch pad according to claim 61, wherein the receiving means comprise, for each area or point, a reflecting means or lens means for directing the light received at the area or point on to the detectors.

73. (Previously Presented) A touch pad according to claim 61, wherein the receiving means comprise means for detecting light emitted at a predetermined point of the first surface in two different directions and means for determining the position of the predetermined point from the directions in which the light was detected.

74. (Previously Presented) A touch pad according to claim 73, wherein the detecting means comprise reflecting means or lens means for directing the light emitted in the two different directions on to the detectors.

75. (Cancelled)

76. (Previously Presented) A touch pad according to claim 61, further comprising a plurality of slots or apertures provided between the predetermined point at the first surface and the one-

dimensional detectors, the detecting points/areas of the one-dimensional detectors being at least substantially equidistant, and a distance between two adjacent slots being different from a multiple of a distance between two adjacent areas/points of a detector.

77. (Previously Presented) A touch pad according to claim 72, wherein the detectors comprise a CCD detector.

78. (Previously Presented) A touch pad according to claim 77, wherein the CCD detector is a two-dimensional detector having a number of rows of detecting areas, and wherein each receiving means comprises at least one row of the CCD.

79. (Previously Presented) A touch pad according to claim 78, further comprising means for directing light from surroundings of the touch pad to one or more other rows of the CCD.

80. (Previously Presented) A touch pad according to claim 72, wherein a filter means or the reflecting/lens means is adapted to transmit at least substantially only light within a predetermined wavelength interval.

81. (Previously Presented) A touch pad according to claim 61, the pad further comprising a stylus or pen adapted to emit light from a point thereof, the stylus or pen being adapted to transmit light into the light transmissive element when touching and/or being translated over the first surface.

82. (Previously Presented) A touch pad according to claim 61, further comprising means for receiving light from outside the pad and in a plane at least substantially parallel to the first surface and for transporting the light into the light transmissive element, the determining means being adapted to determine a position outside the pad from which the light is emitted.

83. (Previously Presented) A touch pad according to claim 82, wherein the receiving means comprise at least two lens means or mirror means positioned so as to direct light from the outside of the pad along the plane into the light transmissive element.

84. (Previously Presented) A touch pad according to claim 83, wherein the at least two lens or mirror means form part of the light transmissive element.

85. (Previously Presented) A touch pad according to claim 83, further comprising means for directing light transported into the light transmissive element by the transporting means to the determining means.

86. (Previously Presented) A touch pad according to claim 61, further comprising a stylus or pen having:

- a first light transmitting channel along a predetermined axis of the stylus or pen,
- means for providing light into and along the transmitting channel,
- means for outputting the light from the transmitting channel,
- a receiving channel being adapted to receive light output from the transmitting channel and having been reflected outside the pen or stylus, and
- means for directing light from the receiving channel toward the receiving means of the pad.

87. (Previously Presented) A stylus for use in the touch pad according to claim 61, the stylus having a light providing means and means for emitting light provided from a point of the stylus.

88. (Previously Presented) A stylus according to claim 87, wherein the point of the stylus is flexible.

89. (Previously Presented) A stylus according to claim 87, wherein the light providing means is a light emitter.

90. (Previously Presented) A stylus according to claim 87, wherein the light providing means comprises means for receiving light from one or more surrounding light emitter(s).

91. (Previously Presented) A stylus according to claim 87, further having means for varying

an intensity and/or wavelength of the light emitted, the variation being controlled by a controlling means controllable by a user.

92. (Previously Presented) A stylus according to claim 91, wherein the controlling means comprises an area of the stylus, the area being adapted to be exposed to pressure or depression by the user, exposure to pressure or depression will make the controlling means vary the intensity and/or wavelength.

93. (Previously Presented) A stylus or pen having:

- a first light transmitting channel along a predetermined axis of the stylus or pen,
- means for providing light into and along the transmitting channel,
- means for outputting the light from the transmitting channel,
- a receiving channel being adapted to receive light output from the transmitting channel and having been reflected outside the pen or stylus, and
- means for outputting the light from the receiving channel.

94. (Previously Presented) A method of operating a touch pad, the method comprising:
providing a light transmissive element having a first surface adapted to receive light,
providing a first means and a second means comprising at least two detectors, each detector being an at least one-dimensional detector having a number of detecting points or areas, receiving light at the first surface,
transmitting the received light inside the light transmissive element along the first surface,
detecting the transmitted light by the first means and the second means,
outputting, from the first means and the second means, corresponding signals, and
determining, on the basis of signals from the first means and the second means, a position of the first surface having received light,

the detecting step comprises detecting light received at at least two different areas or points, the determining step comprising determining an angle of incidence of detected light at each area or point, and

detecting light emitted from two different points on the first surface at different points/areas of at least one of the detectors.

95. (Previously Presented) A method according to claim 94, further comprising providing or displaying information through the first surface of the light transmissive element by/from a display or monitor.

96. (Previously Presented) A method according to claim 94, wherein the providing step comprises providing a light transmissive element comprising an at least substantially flat light transmissive member having at a surface thereof a light transmissive coating or layer, an upper surface of which forms the first surface of the light transmissive element.

97. (Previously Presented) A method according to claim 96, wherein the light transmissive member comprises a light transmissive display or monitor.

98.-102. (Cancelled).

103. (Previously Presented) A method according to claim 94, the touch pad further comprising an element having a first side having a number of first predetermined positions for engagement of a user and a second side having a number of second positions or areas corresponding to the first positions, the method comprising the step of, when a first position is engaged by the user, emitting light from the corresponding second position and receiving the emitted light by the first surface.

104. (Cancelled)

105. (Previously Presented) A method according to claim 94, further comprising directing, using a reflecting means or lens means, the light received at the area or point on to the detectors.

106. (Previously Presented) A method according to claim 94, wherein the detecting and determining steps comprise detecting light emitted at a predetermined point of the first surface in

two different directions and determining the position of the predetermined point from the directions in which the light was detected.

107. (Previously Presented) A method according to claim 106, further comprising directing, using reflecting means or lens means, the light emitted in the two different directions on to the detectors.

108. (Cancelled)

109. (Previously Presented) A method according to claim 94, further comprising providing a plurality of slots between the predetermined point at the first surface and the one-dimensional detectors, the detecting points/areas of the one-dimensional detectors being at least substantially equidistant, and a distance between two adjacent slots being different from a multiple of a distance between two adjacent areas/points of a detector.

110. (Previously Presented) A method according to claim 94, the touch pad comprising a two-dimensional CCD detector having a number of rows of detecting points/areas, wherein the detecting step comprises detecting light transmitted by the transmissive means by one or more of the rows of detecting points/elements.

111. (Previously Presented) A method according to claim 110, the method further comprising the step of directing light from surroundings of the touch pad to one or more other rows of the CCD.

112. (Previously Presented) A method according to claim 110, further comprising the step of transmitting at least substantially only light within a predetermined wavelength interval.

113. (Previously Presented) A method according to claim 94, wherein the step of receiving the light comprises providing a stylus or pen emitting light from a point thereof and transmitting light into the light transmissive element when touching and/or being translated over the first surface.

114. (Previously Presented) A method according to claim 94, further comprising the steps of:

- receiving light from outside the pad and in a plane at least substantially parallel to the first surface and
- transporting the light into the light transmissive element,

the determining step comprising determining a position outside the pad from which the light is emitted.

115. (Previously Presented) A method according to claim 114, further comprising providing at least two lens means or mirror means positioned so as to direct light from the outside of the pad along the plane into the light transmissive element.

116. (Previously Presented) A method according to claim 115, wherein the steps of providing the light transmissive element and the lens or mirror means comprises providing the light transmissive element and the lens/mirror means as a single element.

117. (Previously Presented) A method according to claim 115, further comprising the step of directing light transported into the light transmissive element by the transporting means to the determining means.

118. (Previously Presented) A method according to claim 114, the method comprising translating a stylus or pen having:

- a first light transmitting channel along a predetermined axis of the stylus or pen,
- means for providing light into and along the transmitting channel,
- means for outputting the light from the transmitting channel,
- a receiving channel being adapted to receive light output from the transmitting channel and having been reflected outside the pen or stylus, and
- means for directing light from the receiving channel toward the receiving means of the pad over a surface having areas of varying light reflection, the light or stylus directing light of varying intensity toward the touch pad, wherein the determining step comprises determining information from the variation in the

light intensity.

119. (Previously Presented) A method according to claim 94, the method comprising providing light at the first surface using a stylus or pen, the method further comprising the step of varying an intensity and/or wavelength of the light emitted, the variation being controlled by a controlling means controllable by a user, and wherein the determining step comprises detecting the variation.

120. (Previously Presented) A method according to claim 119, wherein the varying step comprises the user depressing an area of the stylus, the depression facilitating the variation of the intensity and/or wavelength.